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ENVIRONMENT DIRECTORATE
JOINT MEETING OF THE CHEMICALS COMMITTEE AND THE WORKING PARTY ON CHEMICALS, PESTICIDES AND BIOTECHNOLOGY

Environment, Health and Safety Programme for 2021-2024

60th Joint Meeting of the Chemicals Committee and the Working Party on Chemicals, Pesticides and Biotechnology

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This document outlines the programme of work on Environment, Health and Safety for 2021-2024. It covers the Overall (Part I and II) Environment Health and Safety Programme. It also outlines the budget and deliverables for the first biennium (2021-2022).

ACTION REQUIRED: ***The Joint Meeting is invited to endorse the proposals outlined in this document, amended as appropriate***

1. Medium-term strategy

1.1. Today's context (Policy environment)

1. The annual global sales of chemicals are expected to grow fourfold between 2017 and 2060[1]. Production in OECD countries currently accounts for more than 50% of the world total, placing the major responsibility for the safety of chemicals and chemical products available on the domestic market — and increasingly, for products traded internationally — on OECD countries and their chemical industries. In this context, countries need a forum where they can agree on overall policies, develop harmonised instruments for their implementation and set frameworks for work-sharing.

2. Given the OECD's record of generating savings through the Environment, Health and Safety (EHS) Programme of at least MEUR 309 annually for industry and governments, countries are looking to continue and even intensify their collaboration.

3. Scientific developments in identifying and assessing the effects of chemicals and products of modern biotechnology on human health and the environment have been substantial in recent years and will continue in the future. Countries are aiming to integrate the results of those novel tools, where the tools fit with their regulatory needs, into their decision-making processes.

4. Many OECD Member countries have modified existing programmes, have set up, or are in the process of setting up, more ambitious programmes to screen or test, assess and manage more chemicals in shorter periods of time. This only increases the need for the co-operative work underway at OECD, in particular for sharing the burden of testing, avoiding duplicative work and optimising the outputs while limiting resources needed. Furthermore as countries are increasing resource productivity and moving towards the circular economy, an alignment of chemicals and waste policies is needed to ensure that recycled material (e.g. plastic containing additives) can be used without harming human health and the environment.

5. The OECD's work in this domain, thereby contributes to meeting the Sustainable Development Goals (SDG). Chemicals management is reflected explicitly in a number of goals and targets, including those addressing health, water and responsible consumption and production.

6. The OECD's share of world chemicals production is expected to drop to approximately 35% by 2060 and total production in the BRIICs will equal that in OECD by 2060. As a result, greater international co-operation will be needed with these and other partner countries to develop capacity, share information and promote effective chemicals management globally. The global value chain is putting new strains on the efficiency of national approaches for the sound management of chemicals and concerted action is needed to address them and to ensure that new chemicals management systems do not lead to duplicative testing and assessments or to new non-tariff trade barriers.

7. Countries are in the process of negotiating a new international framework for the sound management of chemicals and waste to replace the current UN Strategic Approach to International Chemicals Management will run out in 2020. This post-2020 Framework for the Sound Management of Chemicals and Waste is expected to be adopted in October 2020 by the fifth International Conference on Chemicals Management (ICCM5). The

[1] ACC (2018), 2017 Guide to the Business of Chemistry; OECD (2019), Global Materials Resources Outlook to 2060: Economic Drivers and Environmental Consequences

implementation of the new framework over the next few years will provide numerous opportunities for collaboration with Members and Partners towards a broader community of countries adhering to OECD standards.

1.2. Role of the OECD in 2021-2024

8. The OECD's work on chemical safety and biosafety is framed by a number of international agreements [see Box 1] and OECD countries and their chemical industry have a major responsibility for the safety of chemicals and chemical products on their domestic market, and, increasingly, for products traded internationally. Member countries have developed and implemented sophisticated systems to manage many different types of chemicals (such as industrial chemicals, nanomaterials, pesticides and biocides), non-chemical pesticides and biocides and the products of modern biotechnology and the necessary technical tools to implement them, to a great extent through the OECD.

Box 1. Underlying international agreements for the OECD Environment, Health and Safety Programme

Chapters 19 and 20 of the UNCED's Agenda 21 adopted in 1992;

The Bahia Declaration, as adopted in 2000 by the Inter-governmental Forum on Chemical Safety;

The OECD Environmental Strategy for the First Decade of the 21st Century, as adopted by OECD Environmental Ministers in 2001;

Paragraph 23 of the Johannesburg Plan of Implementation, adopted at the World Summit on Sustainable Development in 2002;

UN Strategic Approach to International Chemicals Management, adopted by ICCM in Dubai in 2006 and the emerging policy issues identified by ICCM2, ICCM3, ICCM4 in 2009, 2012 and 2015 (to be replaced by the new post 2020 Framework for the Sound Management of Chemicals and Waste in October 2020 by ICCM5);

The OECD Council Resolution on the Implementation of the SAICM in 2008;

UN Sustainable Development Goals, adopted in September 2015;

UN Chemicals and waste Conventions, such as the Rotterdam Convention on Prior-Informed Consent, the Stockholm Convention on Persistent Organic Pollutants, the Minamata Convention on Mercury, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity, entered into force on 11 September 2003; it is relevant to OECD's work on biosafety.

9. The role of the OECD for almost 50 years has been to assist member countries to meet the twin aims of developing and implementing policies and high quality instruments to protect human health and the environment and of making their systems and processes for managing chemicals as efficient as possible. In order to eliminate duplication of work as far as possible and avoid non-tariff barriers to trade at the same time, emphasis has been on developing frameworks for work sharing in gathering and assessing information on the potential risks of chemicals. The time-tested instruments of the OECD Mutual Acceptance of Data (MAD) system provide the basis for generating savings to governments and

industry. These savings are a measure of the success of OECD's work on chemicals, which is further demonstrated by the adherence of non-members to the MAD system.

10. One of the main strengths of the work done at the OECD on chemical safety and biosafety is its acceptance by member countries in the context of their regulatory frameworks. Indeed, the products developed at the OECD are endorsed by all member countries and are widely used for regulatory purposes in member countries and increasingly in partner countries.

11. The need for assessing more chemicals in a shorter time has driven the development of new tools that help screen, test and assess chemicals more rapidly and less expensively, and with less (or no) use of animals, while maintaining the quality of the resulting information. The OECD's role in expanding the regulatory use of integrated approaches for testing and assessment using (Q)SARs and non-animal test methods will help accelerate the generation of the safety data necessary for the evaluation and management of the great number of chemicals on the market. Furthermore, the early identification of scientific breakthroughs and the development of common approaches at the OECD to integrate new scientific approaches (such as adverse outcome pathways) into regulatory decision-making tools will avoid divergence in the management of individual chemicals and hence avoid non-tariff trade barriers. With the development of new alternative methods for determining the properties of chemicals, new challenges will need to be addressed to maintain the full benefits that MAD provides to governments and industry.

12. As the assessment of the risks of chemicals is becoming more and more a routine activity in countries, regulatory authorities are becoming more interested in exchanging experience on identifying efficient risk management options for individual or groups of chemicals. Based on past OECD activities on risk management of individual chemicals and connecting with work on substitution and alternatives assessment as well as work on the valuation of health effects, the OECD is optimally equipped to provide a forum for exchanging experience on risk management options and socio-economic implications.

13. As countries strive to improve resource efficiency, the use of hazardous chemicals in products presents unique challenges to the goal of achieving a circular economy. The OECD is in a unique position to pull together expertise in chemicals and waste management policies, identify misalignments and develop possible solutions to address them. This combined expertise (especially in the areas of sustainable chemistry and recycling policies) is also crucial in assisting countries to address plastic pollution.

14. The OECD promotes convergence among member countries in order to create a level playing field in areas where information sharing, understanding and confidence, if not strict harmonisation, are of great mutual benefit, such as assessment methodologies and tools for risk reduction. The participation of key policy and technical experts from governments as well as all other stakeholders (industry, trade unions, environmental groups, and the animal welfare community) ensures the acceptance and use of the high quality products which they develop together at the OECD.

15. In view of the expected shifts in the production of chemicals to partner countries, and the fact that more and more of these countries are developing chemicals management frameworks, and in light of member countries' commitment to the objectives of the post 2020 Framework on the Sound Management of Chemicals and Waste, the OECD's work will continue to become more attuned to the needs of these partners as far as they are compatible with those of its member countries to better enable the uptake of the OECD's work in a wider international arena. Hence, there will be an increased focus on outreach activities and tools aimed at promoting convergence of the chemicals management processes and instruments used by partner countries with those of member countries.

16. The OECD has almost 50 years of experience in developing policies and instruments which can be applied widely in the implementation of the post-2020 Framework for the Sound Management of Chemicals and Waste. The OECD will continue to be engaged in a vast number of activities to assist countries in implementing the basic elements for sound management of chemicals and waste throughout their life-cycle in accordance with the strategic objectives of the post 2020 Framework, to be adopted at the 5th International Conference on Chemicals Management in October 2020. It is likely that the OECD will take a leading role in helping member and partner countries meet some of the targets associated with the strategic objectives. For example, in the area of MAD, formal co-operation with selected partner countries will continue. Where possible, engagement with partner countries to help them set up their chemicals management system, implement the GHS, and help them fight illegal trade of pesticides will be initiated.

17. In addition, the OECD will support countries in their efforts to improve or set up their chemicals management systems, by developing methodologies to estimate the benefits to society of adequately managing chemicals throughout their life-cycle and associated costs.

18. Through collaborative work at the OECD, member countries have set more than 20 regulatory standards for chemical safety in the form of Council Decisions and Recommendations. To ensure that OECD remains a leading standard setter on chemical safety policy, the modernisation of the OECD "acquis" will continue.

19. The OECD's EHS programme has long had a role in identifying regulatory issues associated with emerging and converging technologies such as biotechnologies and nanotechnologies. New biotechnologies such as gene editing techniques and synthetic biology may lead to new types of organisms or substances (like RNAi-based pesticides) which pose novel regulatory challenges. Similarly, developments in the materials sciences may lead to advanced materials, which raise new challenges in risk assessment. It will be necessary to follow these developments to ensure that emerging challenges are addressed in a timely way.

1.3. Objectives and expected outcomes of the work at the OECD

20. The objectives of the Environment, Health and Safety Programme are outlined in the mandate of the Committee overseeing the Programme [see ENV/JM(2020)11]. They are reproduced here for the sake of completeness:

21. The main objective of the Committee is to support the development, harmonisation and improvement of Members and Partners' management of chemicals (including nanomaterials, pesticides and biocides) and products of modern biotechnology, with a view to contribute to sustainable development by protecting human health and the environment from the risks of chemicals and products of modern biotechnology, preventing the creation of non-tariff barriers to trade, saving costs to countries and industry, and promoting the convergence of chemicals management systems.

22. The intermediary objectives of the Committee are the following:

1. assist Members and Partners to anticipate, identify and prevent or manage the risks from the exposure to single or multiple chemicals as well as products of modern biotechnology, especially through the development and implementation of harmonised, efficient, effective and innovative instruments for testing, assessment and management;
2. assist Members and Partners in addressing safety issues arising from the development of emerging and converging technologies;

3. assist Members and Partners in their efforts to implement the United Nations framework for the sound management of chemicals and waste post 2020, making implementation of the objectives of the framework, an integral part of its Programme of Work and Budget;
4. ensure efficiencies and optimal use of resources for governments and industry through harmonisation of policies and instruments and by creating mechanisms for sharing work in areas of mutual interest;
5. promote effective and efficient chemical safety policies throughout a globalising world by facilitating co-operation between Members and Partners, in particular between Adherents to the Council Decisions related to the Mutual Acceptance of Data in the Assessment of Chemicals [OECD/LEGAL/0194 and OECD/LEGAL/0252];
6. ensure coherence, consistency, transparency and efficiency in chemical safety and biosafety policies by providing a forum for obtaining input from all stakeholders;
7. assist Members and Partners in establishing or improving chemicals management systems, *inter alia* by making the outputs as accessible, relevant, compatible and useful as possible, distributing them widely and free of charge, and promoting the public's right to know about the hazards, exposures and potential risks of chemicals and products containing them throughout their life-cycle;
8. assist Members and Partners in their efforts to meet the targets of the United Nations Sustainable Development Goals, as they relate to sound management of chemicals and waste and the reduction of emissions of chemicals to the environment;
9. assist in the fight against the illegal international trade of chemicals, focusing on pesticides; and
10. assist in addressing other issues connected with the sound management of chemicals and waste, such as identifying solutions for the sustainable use of plastics and addressing misalignments between chemicals and waste policies.

2. Environment, Health and Safety Programme for 2021 – 2024

2.1. Overall structure and objectives (output results)

23. The 59th Joint Meeting in June 2019 held a discussion on the priorities for the 2021-2024 EHS Programme [ENV/JM(2019)14, ENV/JM/M(2019)1] and agreed upon a general outline of the 2021-2024 EHS Programme, with a focus on core activities. The general direction of the next EHS Programme is outlined below.

I. Mutual Acceptance of Data and other instruments for cooperation

The work focuses on maintaining and strengthening the OECD system of Mutual Acceptance of Data and the body of legal instruments developed by countries at the OECD. More specifically, this will involve the maintenance and further development of Test Guidelines, especially non-animal methods and Defined Approaches, methods for endocrine disruption and the adaptation of methods for manufactured nanomaterials. The Adverse Outcome Pathway programme will also continue to support the development of Test Guidelines and Defined Approaches. In parallel, new challenges with the implementation of Principles of Good Laboratory Practice will be addressed.

The activity to update the OECD legal instruments related to chemical safety and biosafety will continue and outreach and capacity building in partner countries will focus on GLP/MAD as well as on industrial chemicals management systems.

II. Harmonised methodologies for the risk/safety assessment of chemicals (including nanomaterials)

The work under this output result will focus on facilitating the assessment of more chemicals in a shorter time and to ensure that risk assessments performed in one country are as useful as possible to other countries, to reduce costs, achieve high standards of safety for human health and the environment and to create the conditions for a convergence of risk management decisions between countries in the long term. To meet these goals, work will continue on the exchange of experience in using Integrated Approaches to Testing and Assessment, and on the identification and development of hazard assessment methodology guidance or best practices.

In parallel, work will continue on the development of exposure assessment methodologies, with the addition of a new focus on bridging between new hazard assessment approaches and new exposure assessment approaches, so that the results from both types of methods can be applied together in risk assessment. The work will also continue to adapt the risk assessment tools to manufactured nanomaterials and to address emerging issues, such as the risk assessment of advanced materials.

Furthermore, the work on the development and maintenance of IT tools to support the management of chemicals (such as eChemPortal or the OECD QSAR Toolbox) will continue with an additional focus on integrating all tools into a Global Chemicals Knowledge Base.

III. Tools and approaches for the risk management of chemicals (including nanomaterials) and the prevention of chemical accidents and pollution

The main objective of this output result is for countries to share approaches used to support risk management option selection and decision-making. In addition, a focus on circular economy, sustainable materials management and similar approaches is putting an emphasis on sustainable chemistry approaches and substitution of chemicals. The work also aims at preventing chemical accidents, promoting the harmonised implementation of Pollutant Release and Transfer Registers (PRTRs) and reducing pollution through the promotion of Best Available Techniques (BAT).

In particular, work will continue on (i) the exchange on risk reduction approaches for per and polyfluorinated alkyl substances (PFASs) and supporting the shift to safer alternatives (ii) the development of guiding principles for sustainable design of plastics from a chemicals perspective and addressing issues at the chemical/waste interface; and (iii) the development of criteria and trade-off considerations for safer and more sustainable substitution.

Regarding chemical accidents, work will continue on the update and consolidation of guidance to prevent chemical accidents, with a focus on Natural Hazard Triggered Technological Accidents (NaTech). Guidance to implement PRTRs will continue to be updated and best practices will be developed on the use of PRTR data for risk reduction purposes as well as for measuring progress towards meeting specific targets of the Sustainable Development Goals. Work will also continue on the development of guidance and/or best practices for implementing BAT for pollution prevention, including through the comparison of national/regional BAT documents and associated emission limit values for specific sectors.

IV. Assessing and managing the risks from pesticides and biocides

Regarding pesticides, the objective of the work is to help governments co-operate on the regulation of pesticides and sustainable pest management, in particular in assessing and reducing the risks of agricultural pesticides and in promoting integrated pest management. In particular, the focus of the work will be on (i) the definition and guidance for the determination of residues; (ii) the development of guidance for the assessment of new types of pesticides and biopesticides; (iii) the exchange of experience in the use of new digital and mechanical technologies; and (iv) assisting countries in their fight against illegal trade of pesticides.

The goals of the work on biocides are to promote a common approach to assessing and authorising biocidal products by developing harmonised tools; to encourage a sustainable use of biocides; to help governments and industry to address resource constraints in order to ensure robust risk assessments and encourage innovation. In practice the focus of the work will be on (i) expanding opportunities for work-sharing on authorisation dossiers; (ii) continuing the development of guidance for efficacy testing; (iii) the sustainable use of biocides; and (iv) exchanging experience on compliance monitoring.

V. Tools for assessing the safety of products of modern biotechnology

The aim of the work on the safety of products of modern biotechnology – both for environmental safety and food and feed safety – is to promote the harmonisation of risk/safety assessments of organisms produced through modern biotechnology.

The work will focus on (i) the development of consensus documents on the biology of crops or animals as well as on the composition of food and feed, as a basis of the risk assessment of genetically modified organisms, especially on new plant and animal species of emerging interest; (ii) the exchange of experience with the risk assessment and regulatory framework for products from new technologies such as genome editing and other new breeding techniques; (iii) the development of guidance for the 'safe-by-design' concept; and (iv) strengthening the participation of Partner countries.

2.2. Detailed list of activities (intermediate output results)

24. The detailed list of proposed activities (also called intermediate output results or IOR in the OECD Programme of Work and Budget) is listed in Table 1. A description of the proposed work for each IOR is outlined in Annex A and a list of deliverables to be produced during the first biennium (2021-2022) is provided in Annex B. Compared to the list of activities listed in the previous EHS Programme a few changes are proposed:

- There has been no follow-up to previous work on *Methodologies for evaluating the performance of chemicals management schemes*, and hence no separate activity is proposed. Should the Joint Meeting decide to start work again on this topic, it could be reported under the IOR *Risk Reduction (including socio-economic analysis)*.
- Activities formerly performed under *Methodologies for assessing the costs and benefits of managing chemicals* now focus primarily on socio-economic analysis in the context of risk reduction. It is therefore proposed to group those activities together with other work on risk reduction (e.g. on PFAS) under a broader IOR *Risk Reduction (including socio-economic analysis)*.
- As it is proposed to distribute the work on capacity building to the respective thematic activities, there is no separate IOR for *Dissemination of OECD products*. The two former IORs *Notification and Reporting Tools* and *eChemPortal* are

merged into *Going digital: IT tools supporting the chemicals management processes*. This also reflects the wider OECD Going Digital Strategy.

- As the activities formerly under *Tools and Approaches to support decision-making for the substitution of hazardous chemicals* and *Sustainable chemistry* are more and more converging, and to take into account proposed work on sustainable plastics, it is proposed to merge the activities under a single IOR *Sustainable Chemistry (including sustainable plastics, alternatives assessment and substitution)*.
- To reflect the continued interest of countries in our work on Best Available Techniques and the possible linkages with PRTRs, the former IOR *Pollutant Release and Transfer Registers* is renamed *Pollutant Release and Transfer Registers and Best Available Techniques*[2].

Table 1. List of Output Results and Intermediate Output Results

Output Results	Intermediate Output Results
I. Mutual Acceptance of Data and other instruments for cooperation	i. Test Guidelines ii. Good Laboratory Practice and Compliance Monitoring iii. Mutual Acceptance of Data and adherence of partner countries to MAD iv. Evaluation and updating of OECD legal instruments ("acquis") on chemicals and adherence of partner countries to them
II. Harmonised methodologies for the risk/safety assessment of chemicals (including nanomaterials)	i. Methodologies for Hazard Assessment (including Integrated Approaches for Testing and Assessment) ii. Methodologies for Exposure Assessment iii. Methodologies for the risk/safety assessment of nanomaterials and other advanced materials iv. Going digital: IT tools supporting the chemicals management processes
III. Tools and approaches for the risk management of chemicals (including nanomaterials) and the prevention of chemical accidents and pollution	i. Risk Reduction (including socio-economic analysis) ii. Sustainable Chemistry (including sustainable plastics, alternatives assessment and substitution) iii. Chemical Accidents iv. Pollutant Release and Transfer Registers and Best Available Techniques
IV. Tools and approaches for assessing and managing the risks from pesticides and biocides	i. Pesticides ii. Biocides
V. Tools and Approaches for the risk/safety assessment of products of modern biotechnology	i. Environmental Safety ii. Global Forum on Biotechnology iii. Novel Food and Feed Safety

2.3. Expected outcomes of the work

25. The expected outcomes of the work performed under the EHS Programme are:

Awareness/Understanding[3]

- Increased awareness and understanding of the adverse effects of chemicals, including endocrine disruptors and manufactured nanomaterials, pesticides,

[2] Reporting the two activities under the same Intermediate Output Result" is independent of the practical organisation and oversight of the activities. For the proposed sub-body structure, see ENV/JM(2020)15

[3] These headings are used in the official OECD template for the Programme of Work and Budget

biocides, products of modern biotechnology and novel foods and feeds on human health and the environment.

- Increased understanding of best practices in chemicals testing, risk assessment and risk management.
- Increased awareness of the benefits of harmonising instruments for assessing the hazards and risks of chemicals.
- Increased awareness of the relationships between chemicals and waste policies.
- Increased understanding of the sustainable design of plastics from a chemicals perspective.

Usage

- Improved use of Member-approved instruments for harmonised regulatory oversight of chemicals testing and assessment.
- Improved mechanisms for countries to "share the burden" of assessing and managing the risks of chemicals internationally.
- Increased use of effective chemicals assessment methodologies, including computer models for property prediction.
- •Increased use of OECD standards in Partner countries.

Effects

- Extended global convergence in chemicals management and the avoidance of trade barriers through adherence of more non-Member countries to the OECD Council Acts related to Mutual Acceptance of Data in the assessment of chemicals.
- Management of human health and environmental risks posed by chemicals, including endocrine disruptors and manufactured nanomaterials, pesticides, biocides, products of modern biotechnology, and novel foods and feeds.
- Prevention of chemical accidents.
- Increased availability of information regarding the release of pollutants into the environment.
- Sustained monetary savings for governments and industry by harmonising regulatory oversight in the area of chemicals, including nanomaterials, pesticides, biocides, products of modern biotechnology and novel foods and feeds.
- Reduction of illegal trade of pesticides.
- Effective implementation of the UN Sustainable Development Goals.
- Effective implementation of the post-2020 international framework on the sound management of chemicals and waste.

2.4. Linkages with the Sustainable Development Goals, the Global Chemicals Outlook II and the post-2020 international framework for the sound management of chemicals and waste

26. In Annex A, the contribution of each Output Result to the Sustainable Development Goals, the Global Chemicals Outlook II and the post-2020 international framework for the

sound management of chemicals and waste is analysed. This analysis is briefly summarised below.

2.4.1. Sustainable Development Goals

27. The OECD's work on risk assessment and risk management methodologies is applicable to any type of chemical and any stage in its lifecycle, independent of their use and addresses environmental protection (all media) as well as worker and consumer safety (including the safety of children). The work is therefore not only contributing to meeting Sustainable Development Goal (SDG) 12 and specifically **Target 12.4**[4] on the sound management of chemicals and waste but also **Target 3.9**[5] on reducing deaths from pollution and **Target 6.3**[6] on water quality.

28. In addition, a number of specific programmes contribute to other SDG targets:

- The programme on pesticides and sustainable pest control as well as the programme on biosafety and food and feed safety contribute to **Target 2.4**[7] on sustainable food production.
- The programme on chemical accident prevention, preparedness and response contributes to Targets 12.4, 3.9 and 6.3, but also **Target 11.5**[8] on reducing the impact of disasters.
- The programme on Pollutant, Release and Transfer Registers, in addition to contributing to pollution reduction, contributes to **Target 12.5**[9] on the reduction of waste generation.

2.4.2. Global Chemicals Outlook

29. For the same reasons as outlined above, the proposed 2021-2024 EHS Programme directly addresses a number of the recommendations from the second UNEP Global Chemicals Outlook (GCO II)[10]. In particular many of the activities contribute to:

- **Action 1 Develop effective management systems**, e.g. through the implementation of national compliance monitoring systems for GLP, the

[4] Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment.

[5] Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

[6] Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

[7] Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices.

[8] Target 11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

[9] Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

[10] For the full GCO II, see https://www.unenvironment.org/explore-topics/chemicals-waste/what-we-do/policy-and-governance/global-chemicals-outlook ; for the recommendations, see annex of https://papersmart.unon.org/resolution/uploads/k1900123.pdf#overlay-context=pre-session-unea-4

implementation of PRTRs or assisting countries in fighting the illegal trade of pesticides;

- **Action 3 Assess and communicate hazards**, e.g. through the development of Test Guidelines, the development of harmonised hazard assessment methodologies and the further development and maintenance of eChemPortal;
- **Action 4 Assess and manage risks**; e.g. through the development of harmonised exposure assessment methodologies and the proposed work on risk reduction and sustainable chemistry.

30. In addition, the proposed work will contribute to a number of other actions proposed in the GCO II, specifically

- The work on sustainable chemistry will contribute to **Action 7 Educate and innovate**.
- The work on the implementation of PRTRs and the use of PRTR data will contribute to **Action 8 Foster transparency**.
- The work on the safety of advanced materials and the horizontal work on the valuation of health effects will contribute to **Action 9 Bring knowledge to decision-makers**.
- The work on the use of PRTR data will contribute to **Action 10 Enhance global commitment**.

2.4.3. Post-2020 framework for the sound management of chemicals and waste

31. As the strategic objectives of the post-2020 framework for the sound management of chemicals and waste have not been finalised yet, only a preliminary analysis was performed, based on the draft strategic objectives as outlined in the report from the 3rd Open-ended Working Group of the International Conference on Chemicals Management[11]. From the analysis, it is clear that the strongest contribution of the 2021-2024 EHS Programme is towards **Strategic Objective B: Comprehensive and sufficient knowledge, data and information are generated, available and accessible to all to enable informed decisions and actions**.

32. In addition, the work on risk management and on chemical accidents responds to **Strategic objective A: [Measures are identified, implemented and enforced in order to prevent or, where not feasible, minimize harm from chemicals throughout their life cycle [and waste];]**. Furthermore, the proposed work on the valuation of health effects, on risk reduction and on sustainable chemistry responds to **Strategic objective D: Benefits to human health and the environment are maximized and risks are prevented or, where not feasible, minimized through safer alternatives, innovative and sustainable solutions and forward thinking**.

3. Collaboration with other Committees

33. Council puts a strong emphasis on inter-directorate and inter-committee collaboration. Over the last few years, many initiatives were taken to strengthen the

11 See http://www.saicm.org/Portals/12/Documents/meetings/IP3/INF/SAICM_IP3_INF1_OEWG3-Report_EN.pdf

collaboration with other Committees, especially with the Environment Policy Committee. These collaborations will continue or be enhanced as outlined in Table 2.

Table 2. Collaboration with other Committees

Committee/Sub-body	Topics for collaboration
Environment Policy Committee	***Cost-benefit analysis*** Development of methodologies for assessing the costs and benefits of managing chemicals. ***Performance evaluation*** Evaluation of the performance of national chemicals management schemes as part of Environment Performance Reviews. ***Chemicals & Waste Policy interface*** Identification of misalignments between chemicals and waste policies and possible solutions. ***Water quality*** Development of policy options to address emerging pollutants of concern.
Committee for Scientific and Technological Policy/Working Party on Biotechnology, Nanotechnology and Converging Technologies	***Biotechnology, Nanotechnology and Emerging Technologies*** Identification of emerging issues on nanotechnology, biotechnology and converging technologies.
Committee on Consumer Policy/Working Party on Consumer Product Safety	***Risk assessment methodologies*** Exchange of information on risk assessment methodologies for chemicals and consumer products as well as collaboration on methodologies for tracing chemicals in consumer products.
Investment Committee/Working Party on Responsible Business Conduct	***Risk Management*** Reduction of the use of mercury in artisanal and small-scale gold mining through implementation of OECD due diligence guidance for responsible supply chains of minerals. Reduction of the emissions of hazardous chemicals through the implementation of OECD guidance on due diligence in the garment and footwear industry.
Trade Committee /Joint Working Party on Trade and Environment	***Illegal Trade of Pesticides*** Exchange of information on activities to fight illegal international trade of pesticides.
Committee for Agriculture/Joint Working Party on Agriculture and Environment	***Integrated Pest Management*** Regulatory implications of evolving digital and mechanical technologies for pesticides and pest management.
Regulatory Policy Committee	***International regulatory co-operation*** Exchange of experiences to support building and strengthening capacity for regulatory quality and regulatory reform related to chemicals.

Note:
Source:

4. Allocation of activities and resources to Part I and Part II Programmes of Work and Budget (PWB)

34. Although in practice the work is dealt with as a whole, due to the programme and budget structure of the Organisation [for details, see ENV/JM/RD(2016)4], two separate processes are needed for agreement on the various parts of the overall EHS programme.

35. A part of the work is covered by the Part I Programme of Work and Budget (PWB) and is nominally still under the auspices of the EPOC Working Party on Chemicals, Pesticides and Biotechnology. The programme of work and proposed outputs for Part I activities are submitted by EPOC to the Budget Committee and Council as part of the Part

I PWB. Should Council agree to transfer the responsibility of the work done from EPOC to the Chemicals Committee [see ENV/JM(2020)11], the Chemicals Committee – under its new name – will officially be responsible for developing the Part I PWB as of 1 January 2021.

36. The Part II Chemicals Management Programme is overseen by the Chemicals Committee and the proposed outputs, once endorsed by the Committee, are submitted to the Budget Committee and Council via the Part II Programme of Work and Budget (PWB) process.

37. Traditionally, the Part II budget funds work on developing methodologies for all steps in the risk assessment and risk management process of chemicals that are in general applicable to different types of chemicals. Part I funds are usually dedicated to risk assessment and management methodologies dedicated to specific types of chemicals (such as pesticides or biocides) and non-chemical products (such as bio-pesticides or genetically modified organisms) or applicable to hazardous installations. Some output results, in particular those related to the implementation of Council Decisions on Mutual Acceptance of Data (Test Guidelines, Good Laboratory Practice and Compliance Monitoring, Mutual Acceptance of Data and adherence of non-members to MAD, evaluation and updating of OECD legal instruments), are related to core activities of the EHS Programme and therefore appear in both Part I and Part II.

38. The following should be taken into account when considering the resources available for the overall Programme:

- Council and the Environment Policy Committee (EPOC) attach a high priority to horizontal work, which is seen as a major comparative strength of the OECD, it being a multidisciplinary organisation. For the 2021-2024 period, some resources of the EHS Programme are reserved for contributing to horizontal activities.
- For many of the expected outputs mentioned in Annex B, voluntary contributions will be needed to achieve them as in the past.

39. While the main structure of the work programme and the work areas would apply for the four-year period from 2021-2024, it should be kept in mind that the OECD has a two-year budget cycle. The expected outputs described in Annex B therefore only cover 2021 and 2022. In 2022, this document will be updated with the expected outputs for 2023 and 2024. In addition, the level of resources which will be available may have to be adapted to take into account decisions of the Council concerning the budget envelope for the 2021-2024 period.

40. The evolution of the resources available for the EHS Programme is outlined in document ENV/JM(2019)13/REV2. The overall budget for the EHS Programme for 2020 was set at kEUR 4609 (including an overhead charge paid to Part I from the Part II budget of kEUR 263). The 2020 budget will have to be adjusted following a higher than expected salary increase to maintain the OECD pension fund (2.6% increase instead if 1.5% increase). To maintain the same level of outputs in 2021-22, the overall budget of the EHS Programme would be about kEUR 4899 per year (excluding the overhead charge paid to Part I from Part II). The increase would be due to the salary increase in 2020 and an estimated additional salary increase of 2% and step and grade adjustments in 2021.

41. Along with the expected outputs a proposal for the distribution of the available resources among the activities that are needed to produce these outputs is given in Annex B. The distribution takes account of the general directions of the priority setting performed by the Joint Meeting in 2018 [ENV/JM/RD(2018)5] as well as decisions made since by the Joint Meeting. The Joint Meeting is invited to provide input on possible adjustments

through a priority setting exercise to be held prior to the 60th Joint Meeting in February 2020 [ENV/JM(2020)13]. This priority setting exercise will determine lower-priority programme areas that would be negatively affected in case voluntary contributions are lower than predicted.

42. Until 2020, the Part I PWB is established by EPOC in the framework of the Environment Programme. Part I regular resources for outputs on Environment, Health and Safety are allocated according to priorities set by EPOC, both among the expected output results within the EHS output area (2.3.3) and between this output area and the other output areas of the Environment Programme. The EHS output area must thus compete in the EPOC priority setting with work on, e.g., environmental performance reviews, water or climate change. Due to the fact that countries tend to rely on a significant part of the work on chemicals being carried out with Part II and extra-budgetary resources, the EHS output area (2.3.3) risks not being among the top ranking EPOC priorities. This has potential consequences in the case that budget cuts are required. In case Council accepts to transfer the responsibility of the Part I PWB to the Chemicals Committee [see ENV/JM(2020)11], this priority setting will be performed directly by the Chemicals Committee (under its new name) for the 2023-2024 PWB.

Results of the Programme Implementation Reporting (PIR)

43. The completed output results that are produced in the OECD are evaluated bi-annually through a Programme Implementation Reporting (PIR) process. In early 2019, member countries were asked to rate both the quality and impact of delivered outputs in the 2017-2018 Part I Programme of Work and Budget. Committees are requested to review these results and reflect on them as appropriate in developing their Programmes for the next biennium. The results will be made available to Joint Meeting Delegates.

Results of the Medium-Term Orientation Exercise (MTO)

44. Early in the preparations for a new PWB, a Medium Term Orientations (MTO) survey is conducted, in which consolidated government views are solicited The MTO exercise for the 2021-2022 Part I PWB was issued in mid-2019. The results of the MTO will be made available so that the Joint Meeting can better situate its work within the work of the Organisation.

5. Other considerations

5.1. Gender Mainstreaming

45. Men and women can be affected differently from the exposure to hazardous chemicals due to differences in modes of action. This can especially be the case for endocrine disruptors. One of the aims of the OECD Programme on Adverse Outcome Pathways is to identify those differences in mode of action. As part of the development of OECD Test Guidelines, these differences in modes of action are taken into account to prescribe the measurement of effects that are either male- or female-specific. This ensures that countries can take risk management decisions that are equally protective of men and women.

5.2. Global Relations Summary

46. The Global Relations Strategy of the Joint Meeting adopted in 2018 [ENV/JM(2018)38] is designed to help the Joint Meeting to implement its strategic vision of promoting effective and efficient chemical safety policies throughout a globalising world by facilitating co-operation between Members and specific Partners. This can be achieved by engaging Partners in the regular work of the Joint Meeting, by developing capacities, sharing information and promoting effective chemicals management globally. As such, the goals in the engagement with Partners will be to achieve:

- Acceptance by Partners of data generated in the testing of chemicals by countries adhering to the Council Acts on Mutual Acceptance of Data (MAD), for the purposes of the assessment and other uses relating to the protection of man and the environment and eventual adherence to the Council Acts on MAD.
- Convergence of chemical safety and biosafety policies between Partners and Members to: (i) ensure a high level of protection of human health and the environment (ii) benefit from a level playing field in areas of risk assessment and risk management, and (iii) increase the possibilities of work-sharing.

47. These goals remain valid for the 2021-2024 EHS Programme. It is expected that the detailed Global Relations Strategy of the Joint Meeting, to be reviewed by the 61st Joint Meeting in November 2020, will only need minor revisions.

6. Process and schedule for adoption of the Programme of Work and Budget (PWB)

6.1. Part II PWB

48. The following schedule is envisaged for the adoption of the 2019-2020 Part II PWB.

	2020
January	Submission of draft outputs to the Joint Meeting [this document].
4-6 February	Discussion and finalisation of the expected outcomes for 2021-2022 by the Joint Meeting [this document]
June/July	*Budget Committee discussion of the budget envelope and the preliminary PWB submissions.*
September	Finalisation and approval of the draft PWB submission by the Chemicals Committee (taking on board any comments made during the preliminary presentations to the Budget Committee). As the Chemicals Committee will not meet at this time, this approval will be sought through written procedure.
October	*Submission of the draft PWB to Council and the Budget Committee.*
November/December	*Discussion in the Budget Committee*
December	*Approval by Council of the PWB 2021-2022 on the basis of a report by the Chair of the Budget Committee.*

Note: items in italic are not under the JM's responsibility.

6.2. Part I PWB

49. The following schedule is envisaged for the 2021-2022 Part I PWB by EPOC. The Secretariat will keep the Joint Meeting informed at each of the steps of the process so that

the necessary communication between the Joint Meeting Delegates and the EPOC Delegates can take place.

	2019
25-27 September	First discussion of the mainlines of the programme of work by EPOC at their meeting in September [ENV/EPOC(2019)5].
	2020
4-6 February	Discussion of the expected outcomes for 2021-2022 by the Joint Meeting [this document]
February	*Ambassador's Convergence Paper*
February	*Secretary General's Guidance on strategic directions for the 2019-20 PWB to be issued (to include resource assumptions)*
March – April	*Development of the Secretary-General's Strategic Orientations Paper for the Meeting of Council at Ministerial Level*
27-30 April	EPOC to discuss its draft Part I PWB.
June/July	*Budget Committee discussion of the budget envelope and the preliminary PWB submissions.*
September	Finalisation and approval of the draft PWB submission by EPOC (taking on board any comments made during the preliminary presentations to the Budget Committee and approving any work to be undertaken with Long Term Reallocation and Central Priority Funds). As EPOC will not meet at this time, this approval will be sought through written procedure.
October	*Submission of the Secretary-General's draft PWB to Council and the Budget Committee.*
November/December	*Discussion in the Budget Committee*
December	*Approval by Council of the PWB 2021-22 on the basis of a report by the Chair of the Budget Committee.*

Note: items in italic are not under the JM's responsibility.

Annex A. The 2021-2024 Environment, Health and Safety Programme: Proposed Projects and Activities

I. Mutual Acceptance of Data and other instruments for cooperation

i. Test Guidelines

The work on Test Guidelines is core to the OECD work on Environment, Health and Safety. Work will continue to update the set of OECD Test Guidelines on a regular basis, by developing, revising or deleting Test Guidelines, under the supervision of the Working Group of the National Coordinators of the Test Guidelines Programme. For the development of new Test Guidelines, the focus will be on the development on non-animal methods that address hazard endpoints not yet covered by alternative methods, including for endocrine disruption. For complex endpoints for which single alternative assays will not be sufficiently predictive to replace animal tests, the OECD will encourage and support approaches using combinations of non-animal methods (e.g. Defined Approaches, batteries of assays) that are amenable to standardisation and are supported by a mechanistic underpinning in Adverse Outcome Pathways (AOPs).

The development, review and publication of AOPs will continue, with a focus on networks of AOPs and AOPs that identify potential in vitro assays to be further standardised.

The Test Guidelines Programme will continue to support the development of harmonised testing methodologies for biocide efficacy, pesticide and nanomaterial safety. In the area of nanomaterial safety testing, an emphasis will be on methods that enable characterisation of nanomaterial-specific physical-chemical properties.

The OECD will facilitate discussions between validation centres for alternative methods and regulators in Member Countries, to enable the continuous uptake and regulatory use of non-animal methods. One of the focus areas may be the evolution of the validation practices due to the nature and complexity of emerging technologies.

ii. Good Laboratory Practice and Compliance Monitoring

The OECD Principles of Good Laboratory Practice complement the OECD Test Guidelines by setting quality standards for the organisation and management of test facilities and for performing and reporting studies. Since 2008, there have been approximately four on-site visits to countries each year as part of the continuing programme of **periodical on-site evaluations of national GLP compliance monitoring programmes** in the framework of the Council Acts related to Mutual Acceptance of Data (MAD). For the period 2021 to 2024, the annual pace of on-site evaluation visits is expected to increase to **five per year** – not counting partner countries which adhere fully to the Council Acts. Work will continue to monitor follow-up to recommendations and technical aspects of the evaluation process itself. **A Best Practice Guide and training** will be developed to assist evaluators participating in on-site evaluations.

Work will continue in the OECD to assist member countries and adhering partner countries in implementing all three Council Decisions related to GLP. **Advisory documents** will continue to be developed as needed for the interpretation and application of the GLP Principles. A special discussion website will continue to be used to solicit comment from GLP facilities and trade associations regarding interpretation of the Principles, and documents on technical guidance and answers to **Frequently Asked Questions** will be developed to respond to difficulties that arise in such interpretations. It is expected that

many of the new guidance outputs will focus on addressing new challenges with the implementation of the Principles as they apply to new and innovative technologies such as cloud-based and other IT systems and solutions. To promote the GLP Principles more widely and avoid duplication, efforts will be made to work with other relevant organisations (e.g., ISO, ICH) on issues of common interest, and solicit input from other stakeholders (e.g., academia, NGOs, receiving authorities, etc.).

Work will be enhanced to collect, store and promote the flow of information across countries concerning the **status of test facility and test study compliance**. **Two Training courses** will also be held to ensure harmonised inspection procedures; and work will continue to support partner countries which are setting up compliance monitoring programmes (see I. iii, below).

iii. Mutual Acceptance of Data and adherence of partner countries to MAD

Partner countries which express an interest in participating in the MAD system will be invited to provisionally adhere to the Council Acts on MAD and unilaterally accept data developed under MAD. This will be followed by the active participation of the Partners as Participants in the work in the OECD on Test Guidelines and GLP and, eventually, by their full membership as Associates in this part of the Chemicals Programme. Technical assistance will be provided to such countries in the form of workshops, provision of expertise on site to assist the establishment of GLP compliance monitoring programmes, and arrangement of participation in inspections and study audits in member countries.

It is expected that peer review teams will evaluate **one to two compliance monitoring programmes of partner countries** which are provisional adherents to the MAD Council Acts between 2021 and 2024, and that one to two partner countries will have become full Members of the MAD system by 2024.

iv. Evaluation and updating of OECD legal instruments ("acquis") on chemicals and adherence of partner countries to them

Work will continue to update the OECD Council Acts related to chemical safety and biosafety in line with the OECD's standard setting review.

To ensure that the system of Mutual Acceptance of Data adapts to the emergence of complex new methods and that the latter follow good practices to maintain a high level of quality, it will be investigated how the Council Acts on Mutual Acceptance of Data can be updated.

Work will continue to update and consolidate the four legal instruments relating to chemical accidents.

Furthermore, work will start to modernise the content of the Council Acts on Risk Assessment and if appropriate to merge them, to ensure their continued relevance.

Following the transfer from OECD's Committee for Science and Technology Policy to the Joint Meeting, the Council Recommendation on the Safety of Recombinant DNA Organisms in Industry, Agriculture and the Environment [OECD/LEGAL/0225] could be updated. This Recommendation dates from 1986, nevertheless, it contains many elements which are still relevant but it should be revised to better fit with biotechnology developments since its adoption. It should also fully reflect the broad goals, outputs and potential activities of the OECD's work on the safety of products of modern biotechnology. An important feature of the Recommendation is its emphasis on the use of and exchange of information for risk/ safety assessment.

In general, work will continue to encourage Partners to adhere to OECD legal instruments.

In accordance with the Decision-Recommendation of the Council on the Co-operative Investigation and Risk Reduction of Chemicals, adopted in 2018, a report back to Council on its implementation will need to be completed by 2023. Similarly, in accordance with the revised Recommendation of the Council on Establishing and Implementing PRTRs, adopted in 2018, a report back to Council on its implementation will need to be completed by 2023. Furthermore, another report to Council on the implementation of the Recommendation on the Safety Testing and Assessment of Manufactured Nanomaterials is scheduled for 2024.

Table A A.1. Contribution of Output Result "Mutual Acceptance of Data and other instruments for cooperation" to international efforts and frameworks

Contributions to	
Targets of the Sustainable Development Goals	**Target 12.4** on the sound management of chemicals and waste **Target 3.9** on reducing deaths from pollution **Target 6.3** on water quality
Actions up to and beyond 2020 identified through the Global Chemicals Outlook II	***3 Assess and communicate hazards***: the proposed work is "*increasing the mutual acceptance of testing data [...] across countries based on accepted methods and scientific criteria*". ***1 Develop effective management systems***: the implementation of national compliance monitoring systems for Good Laboratory Practices "*strengthen[s] institutions and programmes*".
Strategic objectives of the post-2020 framework for the Sound Management of Chemicals and Waste	***Strategic objective B***: Data generated according to OECD Test Guidelines and Principles of Good Laboratory Practice "*enable informed decisions and actions.*"

Notes:
GCOII, see annex of UNEP/EA.4/21
Post-2020 SMCW, see draft strategic objectives in SAICM/IP.3/INF/1

II. Harmonised methodologies for the risk/safety assessment of chemicals (including nanomaterials)

i. Methodologies for Hazard Assessment (including Integrated Approaches for Testing and Assessment)

This area will continue to support the identification and development of methodology guidance or best practices for hazard assessment. It will also include exchange of experience on specific prioritisation, hazard or risk assessment challenges, including in the area of assessing the risks from the combined exposure of multiple chemicals. In parallel with the update of the Council Acts on Risk Assessment an update of the OECD Manual for the Assessment of Chemicals, or new guidance to support the Council Acts, will be developed.

Exchange of experience in using Integrated Approaches to Testing and Assessment, including incorporation of new approach methods, identification of lessons learned and opportunities for harmonisation will continue through the cyclical IATA case studies project. This could include also the exchange of experience and development of guidance on approaches to evidence integration.

In order to ensure bridging between new hazard assessment approaches and new exposure assessment approaches, so that the results of methods can be applied together in risk

assessment, projects between these two areas will be explored, for example on guidance for derivation of biomonitoring-based effect levels will be developed.

Provisions are in place to maintain the ability to submit and agree upon hazard assessments for chemicals that are priorities should countries identify priorities in this area.

Participation in the work of the UN Sub-Committee of Experts on the GHS will continue to enhance implementation of the GHS for classification and labelling. The OECD will focus on 1) improving public access to the results of the chemicals assessments and supporting datasets, 2) publishing available GHS classifications developed by countries and regions in eChemPortal, and 3) participating in discussions under the Sub-Committee of Experts on use of non-animal methods in classification and regarding a potential global list of classifications.

ii. Methodologies for Exposure Assessment

This area of work will continue to facilitate sharing, developing, disseminating, comparing and where possible, harmonising exposure assessment related information, methodologies and tools (e.g. databases, guidance documents, harmonised templates, exposure models) for assessing the impact of the release of chemicals on the environment and various populations including the general population, consumers, workers and children.

Work will continue on developing and updating Emission Scenario Documents (ESDs) for estimating the release of chemicals during their lifecycle including production, processing, use, service-life, recycling, treatment and disposal. This may include the revision of the Guidance Document on Emission Scenario Documents [ENV/JM/MONO(2000)12] to ensure consistency, quality of data and transparency of the ESDs.

Comparing and harmonising methodologies and tools for assessing the specific exposure of chemicals will continue. This will include developing methodologies and tools for child-specific exposure assessment, development of databases on human biomonitoring data and compilation and comparison of exposure models (e.g. multimedia models). Depending on the priorities of countries, the OECD screening tool for estimating overall persistence (POV) and long-range transport potential (LRTP) of organic chemicals may be updated. Work will also continue on sharing of approaches to assess the combined exposure to multiple chemicals and developing guidance for the derivation of biomonitoring-based effect levels. This could include development of guidance on the use and application of PRTR data to assess exposure.

The OECD will facilitate sharing experiences and knowledge for assessing exposure via products, including through the update of the Product Release and Exposure Data Warehouse, and tracking information on chemicals in products across the supply chain.

iii. Methodologies for the risk/safety assessment of nanomaterials and other advanced materials

The work on the assessment of manufactured nanomaterials and other advanced materials will focus on:

- Identifying the needs for new or updated OECD Test Guidelines (TG) or related guidance to take into account the specificities of nanomaterials, or any other advanced materials; and where appropriate propose amendments and / or the development of new TG and Guidance Documents (GD) for all relevant endpoints and properties for ensuring an appropriate hazard characterisation of manufactured nanomaterials and other advanced materials;

- Developing grouping and read across methods for hazard and risk assessment of manufactured nanomaterials and other advanced materials;
- Developing methods to adapt existing risk assessment methodologies to manufactured nanomaterials and other advanced materials, identify best practices to address varying levels of uncertainty in risk assessment based on differing regulatory regimes related to manufactured nanomaterials and other advanced materials, and identify issues in common to be addressed for preparing recommendations that will assist countries in implementing and/ or developing their own regulatory policies for manufactured nanomaterials and other advanced materials;
- Exchanging experience in exposure assessment and exposure mitigation and identifying methods (including sampling techniques and protocols, generating exposure data for evaluating models, and identifying factors to minimize exposures) to improve exposure assessments for manufactured nanomaterials and other advanced materials for workers, consumers and the environment;
- Promoting the sustainable use of nanomaterials from the perspective of Safe by Design/Safe(r) Innovation Approach related to uses with environmental implications; in particular, by considering a risk framework for new nanomaterials and other advanced materials for their full life cycle.

iv. Going digital: IT tools supporting the chemicals management processes[12]

This work area aims to continue work to further improve the OECD-related chemicals IT tools and increase linkages between them in order to evolve towards an integrated Global Chemicals Knowledge Base. This includes maintenance and expansion of eChemPortal [also to serve as a potential entry point to a future Global IUCLID Database], input to future development of IUCLID software [and IUCLID as a global centralised database] and continued update and improvements to OECD Harmonised Templates.

The Global Portal to Information on Chemical Substances (eChemPortal) offers free public access to information on properties of chemicals and allows for simultaneous searches of data contained in multiple databases via searches by chemical identity, by certain properties or effects. Portal participation will continue to be extended to other data sources, particularly to those which can participate in the GHS search functionality. The scope of products disseminated by eChemPortal will continue to be expanded to facilitate accessibility of use and exposure information. [eChemPortal could also evolve to serve as an interface to a future Global IUCLID Database].

The OECD work regarding the IUCLID software focuses on identifying user needs and collaborating with the owners of IUCLID (European Chemicals Agency) to further develop the application, so that it can be used in support of numerous chemicals management systems in Member and Partner countries. Efforts will continue to focus on collecting and discussing user needs and providing guidance to countries as to how the application can be customised to fulfil their national needs.

[Efforts will also involve working towards a Global Chemicals Knowledge Base including support for efforts to create a future Global IUCLID Database that can form a centralised database that other tools can draw from.]

The development of OHTs will continue to closely follow the development and revision of OECD Test Guidelines, and new or revised OHTs will be elaborated accordingly. In

[12] To be updated following discussion of document ENV/JM(2020)2.

addition, OHTs will evolve based on feedback from users of IT systems that have implemented OHTs. The development of new OHTs will also be guided by national/regional reporting requirements for which no OECD Test Guidelines exist.

The development and support of the OECD QSAR Toolbox and computational toxicology approaches will build upon previous achievements in the area and evolve towards further integration with other OECD IT tools.

Other supported projects will be those that favour an increased inter-operability of the AOP-Knowledge Base with other IT tools, and the use of common formats (i.e. OHT) and standardised terminology in the reporting of data populating AOPs.

Finally, the maintenance and possibly the further development of the IOMC Toolbox for Decision Making in Chemicals Management to include additional schemes (on e.g. chemical waste management and countering illicit trade of chemicals and chemical waste) will continue.

Table A A.2. Contribution of Output Result "Harmonised methodologies for the risk/safety assessment of chemicals (including nanomaterials)" to international efforts and frameworks

Contributions to	
Targets of the Sustainable Development Goals	**Target 12.4** on the sound management of chemicals and waste **Target 3.9** on reducing deaths from pollution **Target 6.3** on water quality
Actions up to and beyond 2020 identified through the Global Chemicals Outlook II	***3 Assess and communicate hazards:*** The efforts to harmonise hazard assessment methodologies "*increase the mutual acceptance of […] hazard assessments across countries […]*". The further development and maintenance of eChemPortal directly responds to the action of "*developing a global database of assessed and classified chemicals and for information-sharing and promoting harmonisation of classification.*" ***4 Assess and manage risks:*** The development of harmonized exposure assessment methodologies directly responds to the action of "*sharing knowledge on existing risk assessment and management approaches and tools (e.g. exposure scenarios more widely)*" as well as "*further developing and refining exposure […] methods.*" ***9. Bring knowledge to decision-makers:*** The work on advanced materials will help "*identify emerging issues at the international level*".
Strategic objectives of the post-2020 framework for the Sound Management of Chemicals and Waste	***Strategic objective B***: The efforts to harmonise hazard assessment methodologies and the further development and maintenance of eChemPortal directly responds to "*Comprehensive and sufficient knowledge, data and information are generated, available and accessible to all to enable informed decisions and actions*"

Notes:
GCOII, see annex of UNEP/EA.4/21
Post-2020 SMCW, see draft strategic objectives in SAICM/IP.3/INF/1

III. Tools and approaches for the risk management of chemicals (including nanomaterials) and the prevention of chemical accidents and pollution

i. Risk Reduction (including socio-economic analysis)

As countries are more routinely taking risk management decisions on more and more chemicals, there is an opportunity to share approaches used to support risk management option selection and decision-making.

The proposed focus of the work under risk reduction includes the exchange of experience on the management of risks of chemicals including on socio-economic analysis and documentation of lessons learned. It would also include the continued exchange of experience on risk reduction approaches for PFASs and supporting the shift to safer alternatives.

Specific areas of work on risk reduction would include:

- Exchange of information and development of case studies on the effectiveness of different risk management options, lessons learned from the design of regulations and how to best measure their effectiveness.
- Exchange of information and development of a catalogue of risk management options to address different types of risks.
- PFAS work[13]

Existing horizontal work with other parts of the OECD on the valuation of health effects will continue. Furthermore, collaboration will continue so that chemicals management is addressed more routinely in OECD Environmental Performance Reviews.

Capacity-building events will be organised to help partner countries to better manage chemicals, in particular by guiding them in establishing industrial chemicals management schemes.

ii. Sustainable Chemistry (including sustainable plastics, alternatives assessment and substitution)

Sustainable chemistry is a scientific concept that seeks to improve the efficiency with which natural resources are used to meet human needs for chemical products and services. Sustainable chemistry encompasses the design, manufacture and use of efficient, effective, safe and more environmentally benign chemical products and processes. Sustainable chemistry is also a process that stimulates innovation across all sectors to design and discover new chemicals, production processes, and product stewardship practices that will provide increased performance and increased value while meeting the goals of protecting and enhancing human health and the environment.

In 2021-2024 work on sustainable chemistry will continue on three aspects: 1) development of guiding principles for sustainable design of plastics, building upon work on the criteria for sustainable design of plastics from a chemicals perspective; 2) exchange of experience and identification of solutions to address issues at the chemical/waste interface; 3) exchange of experience and development of guidance on substitution and alternative assessment which could include, resources allowing, exploration of policy options to foster innovation for safer alternatives.

iii. Chemical Accidents

In the period 2021-2024, there will be the continuation and finalisation of two projects. Work will continue on the revision of the flagship publication of the programme, the Guiding Principles for Chemical Accidents Prevention, Preparedness and Response (publication is planned for 2022). The Guidance on the Benefits of Regulations for Chemical Accidents will also be finalised with improved features from the description that was worked on in the previous work programme.

[13] To be updated following the discussion of document ENV/JM(2020)7

There will also be the start of new activities. The next work programme will see the third phase of the project on Natural Hazard Triggered Technological Accidents (Natech) with, notably, the development of a Guidance on Natech Risk Management in cooperation with partner agencies. There will also be space allocated for addressing emerging issues with smaller scale projects (with, for example, a simple collection of information or exchange via webinars). Issues of interest are, for example: remediation, competencies and training, safety and security (in particular cybersecurity), risks linked to the increased use of hydrogen, remote control and transport of dangerous goods.

As usual, emphasis will be put on the sharing of information and lessons learnt via the joint EU-OECD-UNECE accident reporting and analysis scheme and collaboration with the Major Accident Hazards Bureau of the European Commission's Joint Research Centre. Close cooperation with partner agencies will continue, in particular, through participation in the Inter Agency Coordination Group on Chemical/Industrial Accidents. The possibility to hold National Policy Dialogues on Industrial Safety in Partner countries in cooperation with the UNECE will also be explored.

iv. Pollutant Release and Transfer Registers and Best Available Techniques

Work on PRTRs will focus on improving the harmonisation of PRTRs across countries, assisting countries in setting up or improving their PRTR systems, and enhancing the application of PRTR data, with the ultimate objective to use PRTR information to improve efficiencies, monitor the impact of environmental policies and reduce emissions of chemicals and waste.

For further harmonisation of PRTRs, the Harmonised List of Pollutants [ENV/JM/MONO(2014)32] and the Harmonised List of Reporting Sectors [ENV/JM/MONO(2013)5] will be updated. To assist countries in improving their PRTR systems, the OECD will facilitate sharing experiences and knowledge on estimation of releases and transfers of chemicals from various sources. To explore potential uses of PRTR data, work will continue to evaluate progress towards meeting specific targets of Sustainable Development Goals, and to share best practices on the use of PRTR data for risk reduction including through a recurring international comparison of PRTR data, where feasible. To support these areas of work, existing OECD databases on PRTRs will be maintained and updated as needed.

Work will continue to assist governments in implementing policies and practices that embody Best Available Techniques (BAT) to prevent and control industrial pollution, including the development of a guidance document on determining BAT and the comparison of BAT documents and associated emission limit values for specific sectors.

Resources allowing, work will also be initiated to assist Partner countries in implementing BAT policies for pollution prevention.

Table A A.3. Contribution of Output Result "Tools and approaches for the risk management of chemicals (including nanomaterials) and the prevention of chemical accidents and pollution" to international efforts and frameworks

Contributions to	
Targets of the Sustainable Development Goals	**Target 12.4** on the sound management of chemicals and waste **Target 3.9** on reducing deaths from pollution **Target 6.3** on water quality **Target 11.5** on reducing the impact of disasters **Target 12.5** on the reduction of waste generation
Actions up to and beyond 2020 identified through the Global Chemicals Outlook II	***1 Develop effective management systems***: The implementation of PRTRs as well as regulations to prevent chemical accidents "*strengthen[s] institutions and programmes*". ***4 Assess and manage risks:*** The proposed work on risk reduction directly responds to the action of "*sharing knowledge on existing risk […] management approaches […] more widely*". The work on sustainable chemistry contributes towards "*advancing informed and non-regrettable substitution of chemicals of high concern*". ***7. Educate and innovate:*** The work on sustainable chemistry contributes to "*facilitating a better global understanding of green and sustainable chemistry concepts*". ***8. Foster transparency:*** The implementation of PRTRs contributes to "*disclosing robust and understandable information about hazardous chemicals in the supply chain to workers, consumers, citizens and communities.*" ***9. Bring knowledge to decision-makers***: The horizontal work on the valuation of health effects contributes to "*developing a study on the global costs of inaction […]*" ***10. Enhance global commitment***: The work on using PRTR data will contribute towards "*monitoring, tracking and reviewing collective action and progress […]*"
Strategic objectives of the post-2020 framework for the Sound Management of Chemicals and Waste	***Strategic objective A:*** The work to exchange experience on effective risk management options as well as the work to develop guidance to prevent chemical accidents responds to "*Measures are identified […] in order to prevent or […] minimize harm from chemicals throughout their life-cycle*". ***Strategic objective B***: The implementation of PRTRs directly responds to "*Comprehensive and sufficient knowledge, data and information are generated, available and accessible to all to enable informed decisions and actions*". ***Strategic objective D***: The proposed combined work on the valuation of health effects, risk reduction and sustainable chemistry responds to "*Benefits to human health and the environment are maximised and risks are prevented or […] minimised through safer alternatives, innovative and sustainable solutions and forward thinking*";

Notes:
GCOII, see annex of UNEP/EA.4/21
Post-2020 SMCW, see draft strategic objectives in SAICM/IP.3/INF/1

IV. Assessing and managing the risks from pesticides and biocides

i. Pesticides

The objective of the Programme on Pesticides and Sustainable Pest Management is to help governments co-operate on the regulation of pesticides and sustainable pest management, in particular in assessing and reducing the risks of agricultural pesticides and in promoting integrated pest management.

In 2021-2024, the work will focus on developing guidance for the data requirements and assessment of new types of products, such as pesticides derived from novel technologies

(e.g. **double-stranded RNA pesticides)** as well for **traditional agricultural chemicals** and **bio-pesticides.** New and updated Test Guidelines and Guidance Documents, will be developed in cooperation with the Test Guidelines Programme for **residues of pesticides**, including in honey and products of aquaculture, **insect pollinators**, and **microbial bio-pesticides**. With respect to the registration of pesticides, work will focus on the **digital transformation** of pesticide risk assessment and an activity on e-Labels to identify common global terminology for pesticide structured labels, and **facilitating registration of minor uses** by establishing exchanges and sharing of minor use data or assessments.

As the farming sector is moving rapidly to use **drones** to apply pesticides - but such approaches may pose challenges to pesticide regulatory agencies - OECD will work with governments to develop guidance on the necessary data requirements to support these types of pesticide applications. Work will continue on post-registration activities in particular by developing tools to implement the OECD Recommendation on **countering the illegal trade of pesticides**, maintaining the Rapid Alert System on illegal international trade of agricultural pesticides, and holding training workshops in OECD and partner countries for inspectors, customs officials and pesticide regulatory agencies to identify illegal pesticides throughout their lifecycle.

ii. Biocides

The goals of the Biocides Programme are to promote a common approach to assessing and authorising biocidal products by developing harmonised tools; to encourage a sustainable use of biocides; to help governments and industry to address resource constraints in order to ensure robust risk assessments and encourage innovation.

In 2021-2024, the work will focus on **facilitating biocide registration** and expanding the opportunities for work sharing on authorisation dossiers for biocides by developing tools to facilitate review sharing of studies among regulatory agencies. **The harmonisation of regulatory data requirements, test methods and hazard and risk assessment methodologies** will be promoted, especially as regards exposure assessment. **The sustainable use of biocides and sustainable pest management** will be encouraged by developing harmonized criteria for Best Practice Codes and a common understanding of the sustainable use of biocides. **Efficacy testing** methods will be developed for disinfectants, insecticides and repellents as well as non-chemical alternatives, in particular for rodenticides.

The Biocides Programme will also promote **harmonisation of compliance monitoring and enforcement** that are both critical to the proper functioning of regulatory systems and to the effectiveness of the regulatory requirements and will focus initial activities on the exchange of experience on compliance monitoring and enforcement of treated articles regulations.

Table A A.4. Contribution of Output Result "Assessing and managing the risks from pesticides and biocides" to international efforts and frameworks

Contributions to	
Targets of the Sustainable Development Goals	**Target 12.4** on the sound management of chemicals and waste **Target 3.9** on reducing deaths from pollution **Target 6.3** on water quality **Target 2.4** on sustainable food production
Actions up to and beyond 2020 identified through the Global Chemicals Outlook II	***1 Develop effective management systems***: The proposed work on countering the illegal trade of pesticides assists countries in "*taking measure to address illegal international traffic*". The proposed work to promote harmonisation of compliance monitoring and enforcement for biocides regulatory systems contributes to *"[…] aligning and enforcing legislation and policies […]*". ***4 Assess and manage risks:*** The proposed work on both pesticides and biocides contributes to "*further developing and refining exposure, risk assessment and LCA methods*".
Strategic objectives of the post-2020 framework for the Sound Management of Chemicals and Waste	***Strategic objective B***: The proposed work on both pesticides and biocides contributes to directly responds to "*Comprehensive and sufficient knowledge, data and information are generated, available and accessible to all to enable informed decisions and actions*".

Notes:
GCOII, see annex of UNEP/EA.4/21
Post-2020 SMCW, see draft strategic objectives in SAICM/IP.3/INF/1

V. Tools for assessing the safety of products of modern biotechnology

i. Environmental Safety

The work on the Harmonisation of Regulatory Oversight in Biotechnology will remain focused on the promotion of international harmonisation in environmental risk/safety assessment of organisms produced through modern biotechnology (also called 'biosafety' assessment), and related regulation.

This work will continue to ensure that the information used in the biosafety assessment, as well as the methods used to collect such information, is as similar as possible among countries. This is intended to improve mutual understanding, increase the efficiency of environment risk/safety assessment, avoid duplication of effort and reduce barriers to trade.

Work will also continue to identify and address emerging issues in biotechnology, which would benefit countries from efforts that facilitate harmonisation of regulatory oversight. Currently, a good example is the case of new breeding techniques (NBTs), including genome editing, where a mechanism to facilitate information sharing will be established.

One of the core activities will remain the drafting, publication and revision of science-based consensus documents and other guidance to support biosafety assessments. These documents disseminate information, mainly related to agricultural crop species, trees and micro-organisms which have been the subject of genetic engineering. Nevertheless, the use of consensus documents has been extended to other species in recent years including a number of animals. This trend will continue and other species will be addressed as necessary.

A long-standing project has been the continuing development of BioTrack Online including the OECD BioTrack product database. The product database includes a substantial body of information on products of modern biotechnology that has been approved for commercial use. It also includes increasing amounts of information from partner countries in addition to OECD member countries.

ii. Global Forum on Biotechnology

The Global Forum on Biotechnology, established in 2010, is one of 14 Global Fora created by OECD Committees. Global Fora are best described as broad communities or networks of stakeholders in the areas of responsibility of one or more Committees, but their capacity to accommodate Partners as Participants or Associates is limited. The Global Forum on Biotechnology is managed by the Joint Meeting and the Committee for Science and Technology Policy. It is a network by which Partners, intergovernmental organisations and other stakeholders are incorporated into the activities of the OECD. In the case of the Joint Meeting, it allows participation from those Partners, which have a major interest in transgenic organisms, especially crops, and allows them to contribute to the outputs of the biosafety and novel food and feed safety programmes. The Global Forum will continue in this role in 2021 - 2014

iii. Food and Feed Safety

The work on the Safety of Novel Foods and Feeds will remain focused on the promotion of international harmonisation in the safety assessment of foods and feeds derived from genetically engineered crops.

This work aims to ensure that the types of elements used in food and feed risk/safety assessment, as well as the methods to collect such information, are as similar as possible amongst countries. At the heart of the work is the comparative approach, which is to compare transgenic crops or foods/feeds derived from them with similar conventional products that have a history of safe use.

In co-ordination with the activities on the Harmonisation of Regulatory Oversight in Biotechnology, work will continue to identify and address emerging issues in biotechnology and their potential impacts on novel foods and feeds. This will include NBTs and gene editing.

One of the core activities will remain the drafting, publication and revision of science-based consensus documents and other guidance to support the safety assessment of novel foods and feeds. The 'composition' consensus documents are intended to support the comparative approach, which is used in food/ feed safety assessment.

The work on the safety of novel foods and feeds will continue to contribute to the OECD BioTrack product database especially in relation to those products of modern biotechnology that have been approved for commercial food or feed use.

Table A A.5. Contribution of Output Result "Tools for assessing the safety of products of modern biotechnology" to international efforts and frameworks

Contributions to	
Targets of the Sustainable Development Goals	**Target 2.4** on sustainable food production
SDGs	[…]
Actions up to and beyond 2020 identified through the Global Chemicals Outlook II	NA (the proposed work does not relate to chemicals and waste)
Strategic objectives of the post-2020 framework for the Sound Management of Chemicals and Waste	NA (the proposed work does not relate to chemicals and waste)

Notes:
GCOII, see annex of UNEP/EA.4/21
Post-2020 SMCW, see draft strategic objectives in SAICM/IP.3/INF/1

Annex B. Resources and deliverables in the 2021-2022 Part I and Part II Programme of Work and Budget (PWB)

2021-2022 PROGRAMME OF WORK	Total estimated yearly costs (Part I) in kEUR	Projected percentage of overall Part I[14] resources for 2021-2022	Total estimated yearly costs (Part II) in kEUR	Projected percentage of overall Part II[15] resources for 2021-2022	Projected percentage of overall programme resources
I. Mutual Acceptance of Data and other instruments for cooperation					
i) Test Guidelines	531	24.7	650	23.7	24.1
Deliverables (Part I): - 1-3 Detailed Review Papers/Scoping documents/Background Documents on in vitro assays for the safety testing of complex endpoints, including endocrine disruption; - 1-2 Guideline(s) on Defined Approaches for hazard endpoint(s) requiring the combination of information sources; - 1 or 2 workshops on new endpoints, models and test methods on complex hazard endpoints; - 4-8 AOPs published; Deliverables (Part II) - 1-2 New or updated Test Guideline(s) for endocrine disrupting chemicals; - 2-4 supporting or guidance documents for Test Guidelines; - 2-4 New or Updated Test Guidelines for human health hazard endpoints; - 2-4 new or Updated Test Guidelines for biotic effects on environmental species; - 2-4 webinars in the Series on Testing and Assessment Methodologies; - 2-3 webinars on Emerging Science and Technologies to improve chemical safety;					
ii) Good Laboratory Practice and Compliance Monitoring	41	1.9	87	3.2	2.6
Deliverables (Part I): - One training course for GLP Inspectors Deliverables (Part II) - Eleven to thirteen on-site evaluations. - One to two guidance documents.					
iii) Mutual Acceptance of Data and adherence of partner countries to MAD	41	1.9	132	4.8	3.6
Deliverables (Part I): - One full adherence to MAD of a partner country Deliverables (Part II) - One completed evaluation of a partner country. - One to two workshops in partner countries.					

[14] Both regular assessed Part I contribution as well as additional voluntary contributions

[15] Both regular assessed Part II contribution as well as additional voluntary contributions

2021-2022 PROGRAMME OF WORK	Total estimated yearly costs (Part I) in kEUR	Projected percentage of overall Part I[14] resources for 2021-2022	Total estimated yearly costs (Part II) in kEUR	Projected percentage of overall Part II[15] resources for 2021-2022	Projected percentage of overall programme resources
iv) Evaluation and updating of OECD legal instruments ("acquis") on chemicals and adherence of partner countries to them			51	1.9	1.1
Deliverables: - Draft report to Council on the implementation of the Recommendation of the Council on Establishing and Implementing PRTRs - Draft report to Council on the implementation of the Decision-Recommendation of the Council on the Co-operative Investigation and Risk Reduction of Chemicals - Updated Council Act on Mutual Acceptance of Data - Interim report on the update of the legal instruments related to chemical accidents - Interim report on the update of the legal instruments related to genetically modified organisms					
Subtotal	**613**	**28.5**	**923**	**33.6**	**31.4**
II. Harmonised methodologies for the risk/safety assessment of chemicals (including nanomaterials)					
i) Methodologies for Hazard Assessment (including Integrated Approaches for Testing and Assessment)			605	22.0	12.0
Deliverables: - Four to six case studies on the practical application of Integrated Approaches to Testing and Assessment - Two reports on consideration from case studies on the practical application of Integrated Approaches to Testing and Assessment; - One to two guidance documents or workshop reports to support methodologies for hazard assessment or to support integrated approaches to testing and assessment; - [Joint Assessment of groups of PFAS chemicals]					
ii) Methodologies for Exposure Assessment			248	9.0	5.1
Deliverables: - Two to three new/revised Emission Scenario Documents and/or the revised Guidance Document on Emission Scenario Documents - One to two reports or inventories on exposure assessment to human health and the environment					
iii) Methodologies for the risk/safety assessment of nanomaterials and other advanced materials			423	15.4	8.6
- 2-3 New and updated Test Guidelines and guidance documents for the safety testing of manufactured nanomaterials; - Revision of the guidance on sample preparation and dosimetry. - 1 – 2 reports on exposure assessment or risk assessment - Two reports on recent developments in countries.					
iv) Going digital: IT tools supporting the chemicals management processes			207	7.5	4.2
Deliverables: - Updated version of OECD QSAR Toolbox with continuing expansion of the QSAR Toolbox External Repository and improved connectivity to IUCLID - One to two meetings of the IUCLID user group expert panel to collect and discuss user needs for IUCLID 6 - Five to ten new or revised OECD Harmonised Templates - eChemPortal: participation of two to four additional databases with identity search functionalities, GHS or property search functionalities; maintenance of the content of eChemPortal; development to continue to improve user-friendliness and for continued alignment with the OECD Harmonised Templates and the Globally Harmonised System of Classification and Labelling of Chemicals (GHS); - One new or updated management scheme in the IOMC Toolbox - [Governance structure for a Global Chemicals Knowledge Base including a Global Database]					
Subtotal			**1483**	**53.9**	**30.3**
III. Tools and approaches for the risk management of chemicals (including nanomaterials) and the prevention of chemical accidents and pollution					
i) Risk Reduction (including socio-economic analysis)			104	3.8	2.1
Deliverables: - One to two meetings to discuss exchange of information on different risk management options, working towards case studies and lessons learned					

2021-2022 PROGRAMME OF WORK	Total estimated yearly costs (Part I) in kEUR	Projected percentage of overall Part I[14] resources for 2021-2022	Total estimated yearly costs (Part II) in kEUR	Projected percentage of overall Part II[15] resources for 2021-2022	Projected percentage of overall programme resources
from the design of regulations. - [one to two reports on perfluorinated chemicals; - three to four webinars on perfluorinated chemicals; - updated portal on perfluorinated chemicals] - one capacity building workshop in a partner country					
ii) Sustainable Chemistry (including sustainable plastics, alternatives assessment and substitution)			239	8.7	4.9
Deliverables: - One report or workshop on approaches to support substitution of chemicals of concern; - Update of the substitution and Alternatives Assessment Toolbox - One to two workshops or reports on the sustainable design of plastics from a chemicals perspective or guiding principles for sustainable design of plastics or solutions to address issues at the chemical/waste interface;					
iii) Chemical Accidents	2.12	9.9			4.3
Deliverables: - Update of the Guiding Principles on Prevention of, Preparedness for and Response to Chemical accidents. - One to two guidance documents on aspects related to prevention, preparedness and response.					
iv) Pollutant Release and Transfer Registers and Best Available Techniques	239	11.1			4.9
Deliverables: - One revised guidance document on reporting sectors in PRTRs. - One to two reports on the use of PRTR information - One to two reports on value chain approaches to determining BAT or comparison of BAT for specific sectors/pollutants - One capacity building workshop on establishing PRTRs					
Subtotal	**451**	**21.0**	**343**	**12.5**	**16.2**
IV. Tools and approaches for assessing and managing the risks from pesticides and biocides					
i) Pesticides	401	18.7			8.2
Deliverables: - Three guidance documents on risk assessment/management for pesticides (including bio-pesticides) - Two seminar reports on bio-pesticides - One capacity-building workshop on identifying illegal trade of pesticides					
ii) Biocides	169	7.9			3.5
Deliverables: - Two guidance documents on risk assessment/management/efficacy of biocides					
Subtotal	**571**	**26.6**			**11.7**
V. Tools and Approaches for the risk/safety assessment of products of modern biotechnology					
i. Environmental biosafety	159	7.4			3.3
Deliverables: - Two to three new or updated Consensus or Guidance) documents. - One interim report on New Breeding Techniques - 70-100 approved biotech products updated in the Product database					
ii. Global Forum on Biotechnology	195	9.1			4.0
Deliverables: - Four events in association with the work on biosafety and novel food/ feed safety.					

2021-2022 PROGRAMME OF WORK	Total estimated yearly costs (Part I) in kEUR	Projected percentage of overall Part I[14] resources for 2021-2022	Total estimated yearly costs (Part II) in kEUR	Projected percentage of overall Part II[15] resources for 2021-2022	Projected percentage of overall programme resources
iii. Food and Feed Safety	159	7.4			3.2
Deliverables: - One to two new or updated Consensus (Guidance) documents - One interim report of the project on Novel Food/Feed derived from New Breeding Techniques					
Subtotal	**514**	**23.9**			**10.5**
Overall total	**2149**	**100**	**2750**	**100**	**100**